



Cargolifter AG developer count on CATIA as their strategic 3D-CAD-System platform. CATweb with the help of Web-Technology supports access to model data.

Kontakt:

IBM Direkt Vertriebs GmbH
Am Fichtenberg 1
D-71083 Herrenberg
Telefon: +49 (0) 70 32-15-4 90 27
Telefax: +49 (0) 70 32-15-33 00
E-Mail: industrial@de.ibm.com



© Copyright IBM Corporation 2000

IBM Deutschland
Informationssysteme GmbH
70548 Stuttgart

IBM Österreich
Obere Donaustraße 95
1020 Wien

IBM Schweiz
Bändliweg 21, Postfach
8010 Zürich

IBM Homepage
<http://www.de.ibm.com>
<http://www.de.ibm.com/services>



A new Dimension in Transport Technology through Competency Alliance



Mobility in the skies

IBM technology helps Cargolifter get off the ground

Cargolifter AG, based in Berlin, Germany, was founded on September 1, 1996 with the aim of pioneering the use of airship for the transportation of large and/or heavy objects, thereby opening up a new era in air transportation. With the backing of 93 charter investors, the cornerstone for Cargolifter was laid by a number of scientists, technicians and private investors intrigued by the concept and also by several "traditional" transportation companies. Enterprises like ABB, ContiTech, Danzas, DaimlerChrysler Aerospace, MAN Technology, Liebherr, Linde, Schenker and Siemens are investors as well as cooperation partners. The Cargolifter AG has more than 12,000 shareholders and the initial public offering is scheduled for this spring. IBM and Cargolifter decided to cooperate in an "Alliance of Competence" to implement a broad range of e-business solutions.

Lighter than air

Using the "Lighter-Than-Air" technology, the payload becomes weightless – there's no need for dynamic lift, which is both expensive and wasteful energy. The effect remains the same.

Like a flying crane, the 260 meter (850 feet) long Cargolifter CL 160 will carry oversized loads of 160 tons over distances of up to 10,000 kilometers (6200 miles) at speeds of 80 to 125 kmh (50 to 75 mph). This would allow power plant components to be transported from Europe to South America in just five days – a significant savings in time. The average speed today for such heavy-load, plant construction shipments is a mere 8 kmh (5 mph) and the distances involved are often many thousands of kilometers. The CL 160 carries its huge load with minimal infrastructure and energy require-

ments, nonstop and with absolute precision to practically any destination in the world. Expensive and time-consuming transshipment processes, such as from truck to ship or ship to rail, are now a thing of the past.

Initial experience up to completion of the prototype is being gathered by the present workforce of more than 200 employees with the experimental airship 'Joey', which is 1/8th the normal scale. The "little brother" has already received its license from the German Federal Air Transportation Bureau and passed its initial test flights. The first production facility for what was initially a purely virtual company will be located at the former Soviet airfield in Brand, about 60 km (35 miles) south of Berlin.

Information transparency in every process

Another indispensable factor for this type of company management is the full functionality of a paperless office. From simple scanner-captured business correspondence to highly detailed development documents, employees and business partners can access information of interest to them, provided

The CargoLifter Group is thus a prime example of a completely new generation of companies that consistently include the Internet in the definition of their business processes and IBM is there to help them.

New shareholder management solutions

Subsidiary Cargo Lifter Communications has developed a Lotus Notes based workflow application that directly includes all relevant internal and external partners in the shareholder support process while ensuring strict adherence to security guidelines. To date, this system has reliably managed over 12,000 shareholders. The shareholder support function, board of directors, banks and the accounting department are working hand in hand on an online basis. Other interested parties are included in the process via the Internet. Over the past two years, several hundred thousand inquiries have been successfully processed online. In the runup to the IPO, CargoLifter will be enhancing this system to form its own shareholder community.

e-procurement as the doorway to supply chain

online. The unique factor is the Internet-based information in order to permit integration of the parties have become part of solution is the first important supply chain manage-

Technologies provide support

The engineers also rely on computer technology for airship design. Since 1998, the designers have been using IBM's IA product as a strategic CAD system to develop the heavy-load dirigibles.

Smooth integration of hardware and software

In order to be ready to respond to the rapidly expanding company's high expectations for information technology support for the 25 individual IT projects, IBM business partners will provide seamless integration of completely pre-configured systems in each location. IBM Servers – RS/6000 and Netfinity, Desktops and Thinkpads have already been supplied for the base configuration.

IBM is a strategic partner

From the beginning, IBM has been involved – as a strategic IT partner – in the establishment of the Group, which, in addition to CargoLifter AG, includes the subsidiaries CargoLifter Development GmbH (airship development and production), CargoLifter Network GmbH (logistics and infrastructure), and CargoLifter Communications GmbH (information technology). Overall, about 25 different IT projects are being implemented. At the forefront of these projects is communication with the partners who are responsible for development and production. New computer-aided design methods are involved, as well as system integration, project management and consulting.

From the development of tailor-made e-business concepts to the use of leading edge mobile solutions, the specialized demands of the many facets of this innovative company are taken into account. From the beginning, CargoLifter has been investing in the concept of the virtual company with decentralized resources. Even after physical incorporation at fixed



The airship CL 160 with a length of 260 meter (850 feet).

locations has been completed, some of the employees will continue to be a part of the company only via the data highway.

Furthermore, CargoLifter is cooperating in a technology alliance with IBM, router front-runner Cisco Systems and the telecommunications company e-Plus.